What is claimed is:

1. A method to produce hydrogen from a reformer by reforming a solvent capable of dissolving carbon monoxide

which comprises:

providing said solvent capable of dissolving carbon monoxide, and

producing a vapor containing said solvent and water, and

subjecting said vapor to an electrically heated reformer catalyst to produce a gas containing hydrogen and carbon monoxide, and

subjecting carbon monoxide contained in the previously produced gas containing hydrogen to an electrically heated steam shifting catalyst to create a gas containing hydrogen, carbon dioxide and carbon monoxide remaining from steam shifting, and

scrubbing the previously produced gas containing remaining carbon monoxide in said solvent capable of dissolving carbon monoxide to form a solvent containing dissolved carbon monoxide and a gas containing hydrogen substantially devoid of carbon monoxide, and

separating the previously scrubbed gas containing hydrogen substantially devoid of carbon monoxide from the solvent containing dissolved carbon monoxide, and

vaporizing the solvent containing dissolved carbon monoxide from sensible heat of the gas containing remaining carbon monoxide to form solvent vapor containing carbon monoxide, and

combining vapor containing water vapor to the solvent vapor containing carbon monoxide to provide vapor containing said solvent and water vapor to be employed in the method thereby producing a gas containing hydrogen substantially devoid of carbon monoxide.

2. The method of claim **1** wherein said solvent capable of dissolving said carbon monoxide is selected from the group consisting of ethanol and methanol including an individual or a combination thereof.

3. The method of claim **1** wherein said solvent is ethanol, containing dissolved carbon monoxide, and is vaporized to form vapor containing carbon monoxide and is employed to form gas obtained from a reformer.

4. The method of claim **1** wherein said solvent is methanol, containing dissolved carbon monoxide, and is vaporized to form vapor containing carbon monoxide and is employed to form gas obtained from a reformer.

5. The method of claim **1** wherein said solvent capable of dissolving carbon monoxide is restrained within a vehicle.

6. The method of claim **1** wherein said gas containing hydrogen, substantially devoid of carbon monoxide containing carbon dioxide, is scrubbed with a solution capable of separating carbon dioxide from said gas and separated from the solution containing scrubbed carbon dioxide to produce a gas containing hydrogen substantially devoid of carbon dioxide.

7. The method of claim **6** wherein said solution capable of separating carbon dioxide is selected from the group consisting of aqueous bases and aqueous salts including an individual or a combination thereof.

8. The method of claim **6** wherein previously produced gas containing hydrogen substantially devoid of carbon monoxide and substantially devoid of carbon dioxide contains solvent vapor which is adsorbed in an adsorbent to provide an adsorbent containing adsorbed solvent and a gas containing hydrogen substantially devoid of carbon monoxide and substantially devoid of carbon dioxide and substantially devoid of solvent separated from the adsorbent.

9. The method of claim **8** wherein the solvent adsorbed in an adsorbent is substantially vaporized from the adsorbent to provide solvent vapor and provide adsorbent substantially devoid of solvent .

10. The method of claim **8** wherein said adsorbent is selected from the group consisting of silica gel and alumina including an individual or a combination thereof.

11. The method of claim **6** wherein the previously separated solution capable of separating carbon dioxide, containing scrubbed carbon dioxide, gaseous carbon dioxide is substantially released from the solution to furnish a solution capable of separating carbon dioxide

12. The method of claim **6** wherein said gas containing hydrogen substantially devoid of carbon monoxide and substantially devoid of carbon dioxide supplies hydrogen to power a fuel cell located within a vehicle.

13. The method of claim **6** wherein said gas containing hydrogen substantially devoid of carbon monoxide and substantially devoid of carbon dioxide containing hydrogen is concentrated by an adsorbent selected from the group consisting of activated charcoal and structured carbon including an individual or a combination thereof.

14. The method of claim **13** wherein the adsorbent is restrained in a container located within a vehicle.

15. The method of claim **1** wherein the rate of said reformer gas is substantially regulated upon demand.

16. The method of claim **1** wherein said electrically heated reformer catalyst is heated by electrical elements supplied by electrical energy from a fuel cell.

17. The method of claim **1** wherein said electrically heated steam shifting catalyst is heated by electrical elements supplied by electrical energy from a fuel cell.

18. The method of claim **1** wherein said solvent vapor and water vapor are subject to temperature control to sustain production of hydrogen.

19. The method of claim **1** wherein said solvent containing dissolved carbon monoxide is vaporized from sensible heat within said gas containing hydrogen and containing remaining carbon monoxide to form vapor containing the solvent and carbon monoxide.

20. The method of claim **1** wherein said catalysts for reforming and catalysts for steam shifting are combined with electrically heated elements.